AMENDMENTS TO THE CLAIMS

This listing of claims will replace all previous versions and listing of claims.

Listing of Claims:

1. (Previously Presented) A porous calcium phosphate ceramic body comprising a substrate having fine pores, and three-dimensional nanotunnel layers having pluralities of three-dimensionally connected nanotunnels formed on wall surfaces of said fine pores by mixing together calcium phosphate particles, a dispersant and water to form a slurry in a single dispersion state or near a single dispersion state, immersing said substrate in said slurry, and defoaming said slurry under reduced pressure, wherein said three-dimensional nanotunnel layers are formed in the fine pores inside the substrate.

2. (Original) The porous calcium phosphate ceramic body according to claim 1, wherein said three-dimensional nanotunnel layers have an average thickness of 20 nm to 10 μm.

3. (Cancelled)

4. (Previously Presented) The porous calcium phosphate ceramic body according to claim 1, wherein said three-dimensional nanotunnel layers are formed on 5 to 100% of the wall surfaces of said fine pores.

5. (Previously Presented) The porous calcium phosphate ceramic body according to claim 1, wherein at least part of said nanotunnels have openings communicating with the fine

pores of said substrate.

6. (Original) The porous calcium phosphate ceramic body according to claim 5, wherein said openings have an average diameter of 1 to 5000 nm.

7. (Previously Presented) The porous calcium phosphate ceramic body according to claim 1, wherein said substrate has a porosity of 40 to 98%.

8. (Previously Presented) The porous calcium phosphate ceramic body according to claim 1, wherein the atomic ratio of Ca/P in said three-dimensional nanotunnel layers is substantially equal to or smaller than that in said substrate.

9. (Withdrawn) A method for producing a porous calcium phosphate ceramic body having a three-dimensional nanotunnels layer, comprising the steps of immersing a porous calcium phosphate substrate in a slurry containing fine calcium phosphate particles, defoaming said slurry under reduced pressure, and heat-treating the slurry-carrying substrate.

10. (Withdrawn) The method for producing a porous calcium phosphate ceramic body according to claim 9, wherein said fine calcium phosphate particles have an average diameter of 10 nm to 5 μm.

11. (Withdrawn) The method for producing a porous calcium phosphate ceramic body according to claim 10, wherein said fine calcium phosphate particles are as long as 10 to

200 nm in the c-axis and 1 to 100 nm in the a-axis, and have a specific surface area of 30 to 300 m^2/g.

12. (Withdrawn) The method for producing a porous calcium phosphate ceramic body according to claim 10, wherein said fine calcium phosphate particles are single crystals of calcium phosphate.

13. (Cancelled)

14. (Withdrawn) The method for producing a porous calcium phosphate ceramic body according to claim 9, wherein said heat treatment is conducted at a temperature of 600 to 900°C.

15. (Previously Presented) The porous calcium phosphate ceramic body according to claim 1, wherein the pores of the substrate have diameters of about 50 to 500 μm.

16. (Previously Presented) The porous calcium phosphate ceramic body according to claim 1, wherein said dispersant is a nonionic surfactant.

17. (New) A porous calcium phosphate ceramic body comprising a substrate having fine pores, and three-dimensional nanotunnel layers having pluralities of three-dimensionally connected nanotunnels formed on wall surfaces of said fine pores, wherein the three-dimensional nanotunnel layers are produced by a method comprising:

mixing together calcium phosphate particles, a dispersant and water to form a slurry in a single dispersion state or near a single dispersion state;

immersing the substrate in the slurry;

defoaming the slurry under reduced pressure;

drying the porous calcium phosphate ceramic body at a temperature below a boiling point of water, followed by a heat treatment at a temperature between 600 to 900℃;

wherein the three-dimensional nanotunnel layers are formed in the fine pores inside the substrate.